## Drugs and Aging, 2019

**Supplement: Safety of Anti-Osteoarthritis Medications** 

Recommendations for the reporting of harms in manuscripts on clinical trials assessing osteoarthritis drugs: A consensus statement from the European Society for Clinical and Economic Aspects of Osteoporosis, Osteoarthritis and Musculoskeletal Diseases (ESCEO)

Germain Honvo, Raveendhara R. Bannuru, Olivier Bruyère, Francois Rannou, Gabriel Herrero-Beaumont, Daniel Uebelhart, Cyrus Cooper, Nigel Arden, Philip G. Conaghan, Jean-Yves Reginster, Thierry Thomas, Tim McAlindon

**ELECTRONIC SUPPLEMENTARY MATERIAL 1** 

Table 1: Treatment-emergent adverse events and biological adverse effects in all the intention-to-treat population (safety population) in a two-arm randomized controlled trial

|                                   | Drug<br>(n) | Placebo<br>(n) |                                   | Drug<br>(n) | Placebo<br>(n) |
|-----------------------------------|-------------|----------------|-----------------------------------|-------------|----------------|
| System organ class 1              | f (%)       | f (%)          | System organ class 2              | f (%)       | f (%)          |
| Event 1                           | f (%)       | f (%)          | Event 1                           | f (%)       | f (%)          |
| Event 2                           | f (%)       | f (%)          | Event 2                           | f (%)       | f (%)          |
| Event 3                           | f (%)       | f (%)          | Event 3                           | f (%)       | f (%)          |
| Event 4                           | f (%)       | f (%)          | Event 4                           | f (%)       | f (%)          |
| Event 5                           | f (%)       | f (%)          | Event 5                           | f (%)       | f (%)          |
| System organ class 3              | f (%)       | f (%)          | System organ class 4              | f (%)       | f (%)          |
| Event 1                           | f (%)       | f (%)          | Event 1                           | f (%)       | f (%)          |
| Event 2                           | f (%)       | f (%)          | Event 2                           | f (%)       | f (%)          |
| Event 3                           | f (%)       | f (%)          | Event 3                           | f (%)       | f (%)          |
| Event 4                           | f (%)       | f (%)          | Event 4                           | f (%)       | f (%)          |
| Event 5                           | f (%)       | f (%)          | Event 5                           | f (%)       | f (%)          |
| System organ class 5              | f (%)       | f (%)          | System organ class 6              | f (%)       | f (%)          |
| Event 1                           | f (%)       | f (%)          | Event 1                           | f (%)       | f (%)          |
| Event 2                           | f (%)       | f (%)          | Event 2                           | f (%)       | f (%)          |
| Event 3                           | f (%)       | f (%)          | Event 3                           | f (%)       | f (%)          |
| Event 4                           | f (%)       | f (%)          | Event 4                           | f (%)       | f (%)          |
| Event 5                           | f (%)       | f (%)          | Event 5                           | f (%)       | f (%)          |
| System organ class 7              | f (%)       | f (%)          | System organ class 8              | f (%)       | f (%)          |
| Event 1                           | f (%)       | f (%)          | Event 1                           | f (%)       | f (%)          |
| Event 2                           | f (%)       | f (%)          | Event 2                           | f (%)       | f (%)          |
| Event 3                           | f (%)       | f (%)          | Event 3                           | f (%)       | f (%)          |
| Event 4                           | f (%)       | f (%)          | Event 4                           | f (%)       | f (%)          |
| Event 5                           | f (%)       | f (%)          | Event 5                           | f (%)       | f (%)          |
| System organ class 9              | f (%)       | f (%)          | System organ class 10             | f (%)       | f (%)          |
| Event 1                           | f (%)       | f (%)          | Event 1                           | f (%)       | f (%)          |
| Event 2                           | f (%)       | f (%)          | Event 2                           | f (%)       | f (%)          |
| Event 3                           | f (%)       | f (%)          | Event 3                           | f (%)       | f (%)          |
| Event 4                           | f (%)       | f (%)          | Event 4                           | f (%)       | f (%)          |
| Event 5                           | f (%)       | f (%)          | Event 5                           |             |                |
| Severe adverse events             | f (%)       | f (%)          | Serious adverse events            | f (%)       | f (%)          |
| Event 1                           | f (%)       | f (%)          | Event 1                           | f (%)       | f (%)          |
| Event 2                           | f (%)       | f (%)          | Event 2                           | f (%)       | f (%)          |
| Event 3                           | f (%)       | f (%)          | Event 3                           | f (%)       | f (%)          |
| Event 4                           | f (%)       | f (%)          |                                   |             |                |
| Event 5                           | f (%)       | f (%)          |                                   |             |                |
| Withdrawals due to adverse events | f (%)       | f (%)          | Any adverse event                 | f (%)       | f (%)          |
| Event 1                           | f (%)       | f (%)          | Event 1                           | f (%)       | f (%)          |
| Event 2                           | f (%)       | f (%)          | Event 2                           | f (%)       | f (%)          |
| Event 3                           | f (%)       | f (%)          | Event 3                           | f (%)       | f (%)          |
| Event 4                           | f (%)       | f (%)          | Event 4                           | f (%)       | f (%)          |
| Event 5                           | f (%)       | f (%)          | Event 5                           | f (%)       | f (%)          |
| Other clinically relevant AEs     | -           | -              |                                   |             |                |
| Event 1                           | f (%)       | f (%)          |                                   |             |                |
| Event 2                           | f (%)       | f (%)          |                                   |             |                |
| Event 3                           | f (%)       | f (%)          |                                   |             |                |
| Biological parameters             | -           | -              | Biological parameters (continued) | -           | -              |
| Blood glucose                     | a (%)       | a (%)          | Red blood cells                   | a (%)       | a (%)          |
| Serum level of urea               | a (%)       | a (%)          | White blood cells                 | a (%)       | a (%)          |
| Serum level of creatinine         | a (%)       | a (%)          | Platelets                         | a (%)       | a (%)          |
| AST                               | a (%)       | a (%)          | Haemoglobin                       | a (%)       | a (%)          |
| ALT                               | a (%)       | a (%)          |                                   | 1           | - 17-7         |

n = number of patients analysed (ITT population); f = number of participants who experienced the event at least once during the trial;

a = number of patients with <u>abnormal change in the parameter at all timepoints</u>, from baseline to end of treatment

**Table 2**: Treatment-emergent adverse events and biological adverse effects in the intention-to-treat population (safety population) in a multiple arm randomized controlled trial

| (n)         (n)         (n)           System organ class 1         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4  | (n)  f (%)  f (%) |
|---|--|
| Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 3         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%) <th>f (%) f (%)</th> | f (%)  |
| Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 3         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%) <td>f (%) f (%)</td>             | f (%)  |
| Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 2         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 3         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           F (%)         f (%)         f (%)         f (%) </td <td>f (%) f (%)</td>         | f (%)  |
| Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 2         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 3         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 4         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)  | f (%)  |
| Event 5         f (%)         f (%)         f (%)           System organ class 2         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 3         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)         f (%)           System organ class 4         f (%)         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)         f (%)  | f (%)  |
| System organ class 2         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 3         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 4         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)  | f (%)  |
| Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 3         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 4         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)   | f (%)  |
| Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 3         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 4         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)   | f (%)  |
| Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 3         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 4         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)   | f (%)  |
| Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 3         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 4         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)   | f (%)<br>f (%)<br>f (%)<br>f (%)<br>f (%)<br>f (%)   |
| Event 5         f (%)         f (%)         f (%)           System organ class 3         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 4         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)   | f (%)  f (%)  f (%)  f (%)  f (%)  f (%)   |
| System organ class 3         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 4         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)   | f (%)<br>f (%)<br>f (%)<br>f (%)<br>f (%)  |
| Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 4         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)  | f (%)<br>f (%)<br>f (%)<br>f (%)   |
| Event 2         f (%)         f (%)         f (%)           Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 4         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)  | f (%)<br>f (%)<br>f (%)  |
| Event 3         f (%)         f (%)         f (%)           Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 4         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)  | f (%)<br>f (%)   |
| Event 4         f (%)         f (%)         f (%)           Event 5         f (%)         f (%)         f (%)           System organ class 4         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)  | f (%)  |
| Event 5         f (%)         f (%)         f (%)           System organ class 4         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)  |  |
| System organ class 4         f (%)         f (%)         f (%)           Event 1         f (%)         f (%)         f (%)           Event 2         f (%)         f (%)         f (%)  | f (%)  |
| Event 1       f (%)       f (%)       f (%)         Event 2       f (%)       f (%)       f (%)   | 1,737  |
| Event 2 f (%) f (%) f (%)   | f (%)  |
|   | f (%)  |
| Front 2 $f(0\zeta) = f(0\zeta)$   | f (%)  |
|   | f (%)  |
| Event 4 f (%) f (%)   | f (%)  |
| Event 5   | f (%)  |
| System organ class 5         f (%)         f (%)  | f (%)  |
| Event 1 f (%) f (%) f (%)   | f (%)  |
| Event 2 f (%) f (%) f (%)   | f (%)  |
| Event 3 f (%) f (%)   | f (%)  |
| Event 4 f (%) f (%)   | f (%)  |
| Event 5   | f (%)  |
| System organ class 6         f (%)         f (%)  | f (%)  |
| Event 1   | f (%)  |
| Event 2 f (%) f (%) f (%)   | f (%)  |
| Event 3 f (%) f (%) f (%)   | f (%)  |
| Event 4 f (%) f (%) f (%)   | f (%)  |
| Event 5 f (%) f (%)   | f (%)  |
| System organ class 7         f (%)         f (%)  | f (%)  |
| Event 1 f (%) f (%) f (%)   | f (%)  |
| Event 2   | f (%)  |
| Event 3 f (%) f (%)   | f (%)  |
| Event 4 f (%) f (%) f (%)   | f (%)  |
| Event 5 f (%) f (%)   | f (%)  |
| System organ class 8         f (%)         f (%)  | f (%)  |
| Event 1   | f (%)  |
| Event 2 f (%) f (%)   | f (%)  |
| Event 3 f (%) f (%) f (%)   | f (%)  |
| Event 4 f (%) f (%) f (%)   | f (%)  |
| Event 5 f (%) f (%)   | f (%)  |
| System organ class 9         f (%)         f (%)  | f (%)  |
| Event 1 f (%) f (%)   | f (%)  |
| Event 2 f (%) f (%) f (%)   | f (%)  |
| Event 3 f (%) f (%)   | f (%)  |
| Event 4 f (%) f (%)   | f (%)  |
| Event 5 f (%) f (%)   | f (%)  |

|   | Intervention A | Intervention B | Intervention C | Placebo |
|---|----------------|----------------|----------------|---------|
|   | (n)            | (n)            | (n)            | (n)     |
| System organ class 10                       | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 1                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 2                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 3                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 4                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 5                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Severe adverse events                       | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 1                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 2                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 3                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 4                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 5                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Serious adverse events                      | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 1                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 2                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 3                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 4                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 5                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 6                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 7                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Withdrawals due to adverse events           | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 1                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 2                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 3                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 4                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 5                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Any adverse event                           | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 1                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 2                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 3                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 4                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 5                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Other clinically relevant adverse events    | -              | -              | -              | -       |
| Event 1                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 2                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Event 3                                     | f (%)          | f (%)          | f (%)          | f (%)   |
| Biochemical and other biological parameters | -              | -              | -              | - (0/)  |
| Blood glucose                               | a (%)          | a (%)          | a (%)          | a (%)   |
| Serum level of urea                         | a (%)          | a (%)          | a (%)          | a (%)   |
| Serum level of creatinine                   | a (%)          | a (%)          | a (%)          | a (%)   |
| AST   | a (%)          | a (%)          | a (%)          | a (%)   |
| ALT   | a (%)          | a (%)          | a (%)          | a (%)   |
| Red blood cells                             | a (%)          | a (%)          | a (%)          | a (%)   |
| White blood cells                           | a (%)          | a (%)          | a (%)          | a (%)   |
| Platelets                                   | a (%)          | a (%)          | a (%)          | a (%)   |
| Haemoglobin                                 | a (%)          | a (%)          | a (%)          | a (%)   |

n = number of patients analysed (ITT population); f = number of participants who experienced the event at least once during the trial; a = number of patients with <u>abnormal change in the parameter at all timepoints</u>, from baseline to end of treatment